



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

THE JOURNAL OF POLITICAL ECONOMY

OCTOBER-1906

THE HISTORY OF INDUSTRIAL EMPLOYMENT OF WOMEN IN THE UNITED STATES: AN INTRO- DUCTORY STUDY¹

Underlying most discussions of the employment of women² is the assumption that women in competing with men can “work cheaper,” and that a sort of Gresham’s law exists in the labor market, according to which women’s labor which is cheap drives out men’s labor which is dear, whenever they are brought into competition. The purpose of the present study is to examine this statement in the light of historical evidence as a question of fact rather than of theory and, without any discussion of the assumption regarding the “woman’s lower standard of life” or its effect on wages and employment, to attempt to ascertain to what extent, if at all, the first century of the factory system actually saw the displacement of men by women in the group of occupations designated by the census “manufacturing and mechanical pursuits.” But to understand the effect of the factory system on the employment of women, a study of their relation

¹ This study is part of a larger history of women’s work and wages in this country, for the opportunity of preparing which the writer is under great obligations to the Department of Economics of the Carnegie Institution of Washington.

² It seems unnecessary to point out that the industrial employment of women is an economic problem of very considerable importance. The presence in the “manufactures” group of nearly a million and a half persons who are supposedly able to compete on the basis of a lower standard of life, who are frequently referred to as a “parasitic” body of wage-earners, but who are intelligent and efficient, must necessarily be a factor of influence in the labor market.

to the industrial organization of the seventeenth and eighteenth centuries is a necessary preliminary. Without such a study it would be impossible to throw any light upon certain questions of interest and importance: How far is the gainful employment of working-class women, either in the home or away from it, peculiarly characteristic of the nineteenth century? Has the growth of our manufacturing industries provided a new field for the employment of women? Or has there been only an increase in the opportunity for work in those employments which have long existed? And has the result of it all been that what was formerly "men's work" has passed into the hands of women?

It is believed that an inquiry into the history of women's work, together with a study of the statistics of their employment during the last century, and a consideration of the early attitude toward such work, may be worth while, not only as a contribution toward the history of an important subject, but because of its practical bearing upon the problems connected with the employment of women today. Women's work is often considered too exclusively in its theoretical aspects. Statistics for the first half of the century are not brought into their proper relation with those of the latter half. The early attitude toward women's work is not only outgrown but forgotten. Moreover, attempts to discover how far women have taken men's places as factory employees by a study of census statistics for the last few decades have been, and must necessarily be, futile; for that is merely touching in a superficial way a problem that is as old as the factory system itself.

An attempt will be made, then, to study (1) the industrial employment of women in the seventeenth and eighteenth centuries; (2) statistics of the employment of women in "manufacturing and mechanical pursuits" from 1800 to 1900; and (3) the early attitude toward "women in industry."

PART I. "WOMEN IN INDUSTRY" IN THE SEVENTEENTH AND EIGHTEENTH CENTURIES

The industrial employment of women today may, for purposes of classification be divided as follows: (1) work at home

for the household; (2) work at home for the market; (3) gainful employment outside of the home in factories or workshops. The same classification may be applied to women's work in the eighteenth or even to the seventeenth century, but the relative importance of each division has changed greatly in the transition from one industrial period to another.

In the seventeenth century the industrial employment of women was largely for the immediate benefit of their own households. Their work belonged to what may be technically classified as an intermediate stage of industrial development between the simplicity of household production and the handicraft system. Much of what was manufactured was from raw material furnished by the household and the product, finished, was chiefly for household use. Any part of it that was exchanged belonged to the woman as a true handicraftsman; the material had been hers and until she disposed of it, the product was her own capital. On the other hand, the employment of women in the eighteenth century, particularly in the latter half of the century, was more largely in the manner of what is known as the "domestic" or "commission" system—a system surviving today in the tenement industries.³

The employment of women away from home in what could be identified with our modern "manufacturing and mechanical pursuits" had attained only small proportions in the seventeenth century. But it must not be forgotten that our industrial development was very backward and that few men were so employed. In the industrial organization of that time each household was to a large extent self-sufficing, and it would not be far wrong to say, roughly speaking, that in this organization the men were agriculturalists, the women were manufacturers. Sometimes men were weavers, shoemakers, or tailors, and here and there women of notable executive ability managed farms and planta-

³ This discussion of industrial systems follows in the main Bücher's analysis in his *Industrial Evolution* (Wickctt's translation, chap. iv) and the introductory chapter in Unwin's *Industrial Organization in the Sixteenth and Seventeenth Centuries*, in which Bücher's interpretation is related to the industrial organization of today, though of course neither of their studies relates to this country.

tions.⁴ But by and large the "household manufactures" were carried on by the women; the work on the farms was done almost exclusively by the men.⁵

Girls, like boys, were "apprenticed" when they were very young, but the boy's indenture unlike the girl's usually specified that he was to be taught a trade⁶ and town orders directing that

⁴The best example of women of this sort was the famous Eliza Lucas (see Harriott Ravenel's *Life of Eliza Pickney*) and for an account of other such women see Earle's *Colonial Dames and Goodwives*, chap. vii. In an interesting account of the New England situation, which is worth quoting though connected somewhat indirectly with the subject in hand, Professor Adams said: "It is very pleasant to find that women who were heads of families received in early Salem their proportion of planting land. . . . In Salem, Plymouth, and the towns along Cape Cod, women could not get enough land. . . . It is on the whole rather disappointing to find that maidens or spinsters did not fare quite so well in the distribution of land. The town fathers of Salem began well by granting so called 'maid's lotts' . . . but to avoid "all presidents and evils of granting lotts unto single maidens not disposed of" it was discontinued (*Johns Hopkins University Studies*, first series, July-August, 1883, p. 34). The *Salem Town Records* (p. 32) show "Debora Holmes refused Land being a maid but hath 4 bushels of corn granted her . . . and would be a bad president to keep house alone." In 1665, in Pennsylvania, 75 acres of land were promised to every female over 14 years of age (Geiser, *Redemptioners and Indentured Servants in Pennsylvania*, p. 11).

⁵Daughters and wives helped at home with what was often rather rough work, milking, cutting wood, and the like (see, e. g., Cochrane, *Town of Antrim*, p. 275), and the girl "in service" did similar "chores;" still it cannot be said that women were employed to any extent in field work. An early account of Virginia says: "The women are not (as is reported) put into the ground to worke, but occupie such domestique employments and housewifery as in England, that is, dressing victuals, righting up the house, milking,, employed about dayries, washing, sowing, etc. . . . Yet some wenches that are . . . not fit to be so employed are put into the ground" . . . (Hammond's *Leah and Rachel*, London, 1656, reprinted in Force, *Tracts*, III.) It should be noted that both in England and on the continent women were then regularly hired as reapers, mowers, hay-makers and the like, (see Thorold Rogers, *Agriculture and Prices*, Vol. VI, p. 623, and D'Avenee, *Histoire économique de la propriété, etc.*, Vol. III, p. 52, and Levasseur, *Histoire des classes ouvrières avant 1789*, Vol. II, p. 78.

⁶I have not been able to discover a single case of a girl or woman properly trained for any kind of mechanical work, though perhaps one exception should be made. There is, in the Boston Public Library's collection of manuscripts, one called "Margaret Barton's Memorandum" (1705). The woman seems to have made quite a fortune for those days in "ventures at sea," but had served a full apprenticeship and claimed to have carried on the trade of "chair frame

the children of the poor be bound out sometimes expressly provide that "if boys [they be] put to some useful trade."⁷ The girl's indenture seems to have been a mere binding out to service until she was eighteen, or twenty-one, or until she was married. She was trained doubtless to perform the domestic tasks of the housewife and sometimes it is specified that she is to be taught "the trade, art, or mystery of spinning woollen and linen"⁸ or knitting and sewing as well. The indenture sometimes required, too, that she was to be "learned to read," again unlike that of the boy who was also to be taught writing and occasionally "cyphering."⁹ It is of interest that the court ordered that boys as well as girls were to be taught the "spinning of yarne and working out of flax and hemp;"¹⁰ and girls as well as boys were set to keep cattle in the various towns.¹¹ It is clear, however, that the girl was not properly trained for a trade¹² which bring us to the question of what she did in ways of self-support after she became free.

Although the present study is confined to industrial employment-making." She was, however, an untrustworthy character, and as the *Boston Selectmen's Records* (city Document No. 75, p. 99) show that she was "warned out of town" her testimony is probably not to be largely relied on.

⁷ See, for example, Marvin's *History of Winchendon*, p. 268.

⁸ Bliss, *Colonial Times on Buzzard's Bay*, p. 72.

⁹ *Province Laws*, Vol. I, p. 67, in which it is ordered that poor girls as well as boys are to be bound, "a man child until he come to the age of twenty-one years, and a woman child to the age of eighteen years or time of marriage," and, with regard to instruction, "males to read and write, females to read as they shall respectively be capable" (*Re-enacted Laws*, Vol. II, pp. 182 and 1053). See also Bliss, *op. cit.*, and *Bailey's Andover*, p. 53.

¹⁰ *Massachusetts Colonial Record*, Vol. I, p. 294.

¹¹ *Ibid.*, Vol. II, p. 9.

¹² It is worth noting that, after two hundred years, the apprenticed girl is very much where she was in the beginning. The taking of an industrial census may indicate that apprenticeships for girls is common enough (see, for example, *Sex and Industry*, Massachusetts Bureau of Labor, 1903, p. 210), but a careful examination of the statistics will show practically all of them to be in dress-making or millinery shops where they are general service girls learning only what will make them temporarily useful in the shop. The evil is a more crying one today because men and women work in the same industries where the division of labor has necessarily come to be that of skilled and unskilled, or trained and untrained, the latter being always the "women's work."

ments, there were other gainful occupations for women at this time, such as keeping taverns, or "ordinaries," or selling liquors "out of dores,"¹³ teaching,¹⁴ keeping shop,¹⁵ and the like.¹⁶ The

¹³ It seems worth while to add a few notes regarding some of these occupations which are properly excluded from the discussion as not being "industrial." Keeping taverns and ordinaries was engaged in by women from the earliest days. The great and general court granted the petition of Jane Armitage in 1643 (*Massachusetts Colonial Record*, Vol. II, p. 46) and the *Boston Town Records* through this century and the next are full of notes of the granting of women's petitions for such licenses (see, e. g., *Boston City Document*, No. 50, passim). Occasionally a license was granted to a woman on condition that she "have a careful and sufficient man to manage the house" (*ibid.*, pp. 60, 110, 128). These licenses were invariably granted to widows and wives, never to maids.

¹⁴ "Dames' schools" furnished a common though not a remunerative employment. In New Haven, they were kept earlier than 1656 (Blake's *Chronicles of New Haven Green*, p. 184, and see Sewall's *History of Woburn*, p. 51, for information regarding such work.

¹⁵ Women seem to have been shopkeepers from the first. The *New Haven Colonial Records* furnish an interesting account of a woman who flourished in this occupation in the first half of the seventeenth century. In a controversy in 1643 her opponent appealed to the court and charged that "having heard of the dearnes of her commodities, the excessive gaynes she tooke, [he] was discouraged from proceeding and accordingly bid his man tell her he would have none of her cloth." He asked the court to deal with her "as an oppressor of the common-weale" and offered ten specific charges some of which are worth quoting as illustrating her method of obtaining profits: "(4) that she sold primmeis at 9 pence a piece which cost but 4 pence here in England. . . . (6) She sold a piece of cloth to the two Mecars at 23s. 4d. per yard in wompom, the cloth cost her about 12s. per yard and sold when wompom was in great request. . . ." (*New Haven Colonial Records*, Vol. I, pp. 174-76 and 147). An interesting allusion to this employment for women is found in one of Higginson's letters in 1692: "Also if you should remember your sister Wharton's two daughters to help forward their shop-keeping for they keep a small shop at Boston and are like to continue as ancient maids I know not how long, Sarah being 25 or 26 years old." *Massachusetts Historical Collection*, third series, Vol. VII, p. 199.

¹⁶ It is not easy to give a list of all the minor gainful employments. There were many notable midwives and nurses (see, e. g., *History of Dorchester*, p. 281, and *Records of the City of Dorchester*, p. 46; and numerous references in Sewall's "Diary," *Massachusetts Historical Collection*, fifth series, Vols. I-II) and women traders and speculators (Weeden, *Social and Economic History of New England*, Vol. I, p. 182; and Margaret Barton's memorandum, *supra*, p. 464, gives a clue as to the way in which women in seaboard towns "ventured" their savings; see also Hindmann, *Early Settlers of Nantucket*, p. 134). The raising and sale of garden seeds and the like seems also to have been a common occupation (see advertisements, *Boston Evening Post*, January 25, 1748; *Boston*

most common way for an unmarried woman to earn her board and a few pounds a year in addition was by going out to service, but this can hardly be classified as an industrial employment; though it was much more correctly one in the seventeenth and eighteenth centuries than it is today, for the woman servant was then as truly employed for a large part of her time in the processes of manufacture as is the woman factory operative now. A servant, for example, who was a good spinner was valued accordingly and advertisements in eighteenth-century newspapers frequently mention this as a qualification.¹⁷

Coming to industrial occupations proper, it is necessary to consider separately the direct processes of manufacture carried on by women (1) within and (2) without the home, for a gainful reward either in money or produce.

1. Here again are some minor employments; but while a few women may have been bakers,¹⁸ or engaged in making and selling wine¹⁹ or preserves,²⁰ the great majority of those who were industrially employed at home were to be found in the branch of industry broadly denominated "textiles,"²¹ which included knitting, lacemaking, the manufacture of cards for combing cotton

Gazette, April 19, 1748; *New England Weekly Journal*, March 10, 1741, etc.). In Bristol a woman was ringer of the bell and kept the meeting-house (for 3 £ a year, Weeden, *op. cit.*, Vol. II, p. 404, and *History of Dorchester*, p. 207), and the *New Haven Records*, Vol. I, p. 86, show that in 1643, a woman was to "sweep and dresse the meeting house every weeke and have 1s. a week for her pains." It should be said in conclusion, that these rather fragmentary notes are offered only to show that gainful employment for women is not peculiarly characteristic of the nineteenth century.

¹⁷ See, for example, *Boston Evening Post*, September 12, 1748, for an advertisement of servants, "the women chiefly spinners;" also *ibid.*, May 14, 1750; and *Boston Newsletter*, April 14, 1720.

¹⁸ Felt's *Annals of Salem*, Vol. II, p. 152; and see the mention of Widow Gray's bake-house in Boston, *Boston Newsletter*, January 21, 1711. It is possible that this work ought to be included in work done away from home.

¹⁹ Lilly's *History of Reading*, p. 146.

²⁰ See advertisement in *New England Weekly Journal*, July 5, 1731, of a shop kept by a woman exclusively for the sale of preserves and similar products.

²¹ "Textiles" in this sense includes milliners and dressmakers as well as those engaged in processes of cloth manufacture. See classification in "Occupations," *Twelfth Census*.

and wool as well as sewing, spinning, and weaving. Knit stockings sold for 2s. a pair and occasionally for much more;²² sewing and tailoring brought various prices—one woman made “shirts for the Indians” at 8d. each, and “men’s breeches” for 1s. 6d. a pair.²³ What women earned by spinning and the manufacture of cloth is difficult to estimate. It is, in the first place, almost impossible to discover how large a proportion of “homespun” went to market; and it is also impossible to know how much of the product which was sold by the husband was manufactured by the wife. If Bishop’s theory is correct,²⁴ the system of cloth manufacture in this country was much like that in England. Professional weavers provided themselves with linen warp and raw cotton, which was then carded and spun by their wives and children.²⁵ The cloth which was sold in the neighboring market was thus of the women’s manufacture, in part, though woven and sold by the men. In the eighteenth century as the cloth manufacture developed, there grew up a very steady demand for yarn and the earnings of women spinners were not inconsiderable. Many of the so-called “manufactories” were rooms where several looms were gathered²⁶ and where women delivered and were paid for the yarn they spun at home. In 1764 the Philadelphia association employed more than one hundred persons in

²² Weeden, *op. cit.*, Vol. I, p. 392. Fearing’s account book records that “Ann” sold “a pare of stockens for 16s,” Bliss, *Colonial Times in Buzzard’s Bay*, p. 62.

²³ Temple and Sheldon’s *History of Northfield*, p. 163. The account here is of a woman who in addition to work at tailoring, taught school, worked at spinning and weaving for good pay, managed her own house, was twice married, and had 14 children.

²⁴ Bishop, *History of Manufacture*, Vol. I, p. 309. Bishop’s account seems to make the manufacture of cloth a better organized industry than other accounts would lead us to believe.

²⁵ Bishop’s comment is: “A species of household manufacture thus grew up among the spinners, and weavers scattered widely over the country in the manner which appears to have been contemplated in the early orders of the Massachusetts Assembly.”

²⁶ See Governor Moore’s Report, *Documentary History of New York*, Vol. I, p. 498. See, too, Bagnall, *op. cit.*, p. 57, for an account of an establishment at Brookfield where “they propose to keep a large number of looms constantly at work;” and *ibid.*, p. 80, for Edward Parker’s subsidy for his five looms.

spinning and weaving,²⁷ and certainly a large proportion, if not all, of the spinners were employed at home. The New York association had more than three hundred persons at work in 1767-68 spinning and weaving.²⁸ A Philadelphia "hosier" in 1766 advertises that he "gives the best prices for thread, cotton, worsted and yarns."²⁹ In 1777 a Rhode Island paper notes that "one gentleman at Barnstable has set up a woollen manufactory and receives from the spinners 500 skeins of yarn one day with another."³⁰ The cotton "manufactory" at Bethlehem, Connecticut, advertised for good linen yards "from 3 to 7 runs to the pound for which merchant's price will be paid from 9d. to one shilling per run."³¹ A large number of the four hundred women employed by the United Company of Philadelphia³² worked in their own homes and in an interesting advertisement³³ this "manufactory" offered to "employ every good spinner that can apply, however remote from the factory and, as many women in the country may supply themselves with the materials there and may have leisure to spin in considerable quantities, they are hereby informed that ready money will be given at the factory, up Market Street, for any parcel, either great or small, of hemp, flax or wollen yarn. The managers return their thanks to all those industrious women who are now employed in spinning for the factory."³⁴ The Pennsylvania Society in 1787 also kept two to three hundred women at work spinning linen yarn³⁵ and the New York "Society for Encouraging American Manufactures" was employing 130 spinners in 1789. In 1792 the sailduck factory in Boston had more than

²⁷ Bagnall, *op. cit.*, Vol. I, p. 51.

²⁸ *Ibid.*, p. 54.

²⁹ *Ibid.*, p. 54.

³⁰ Recopied in the *Boston Newsletter and City Records*, December 31, 1825.

³¹ Bagnall, *op. cit.*, p. 197.

³² Bagnall, *op. cit.*, pp. 63-70 and Bishop, *op. cit.*, Vol. I, p. 387.

³³ *Pennsylvania Packet and Gazette*, quoted in Bagnall, Vol. I, pp. 70, 71.

³⁴ *Ibid.*, p. 78.

³⁵ J. E. V. Smith's *The City of New York in the Year of Washington's Inauguration*, p. 109.

four hundred employees and many of the women spinners must have been at work in their homes.

Perhaps the best idea of what home work in the different processes of cloth manufacture meant to the individual can be gained by a study of some extracts from two old memorandum books—one belonging to the seventeenth and the other to the eighteenth century. The first of these is the account of Mrs. Mary Avery with a Boston shopkeeper during the years 1685–89, which shows her to be credited during these years with the following:

By 2 yard $\frac{1}{2}$ of buntin att	
By yard $\frac{1}{2}$ of ditto att 14d.....	3s. 3d.
By 3 yds. $\frac{1}{4}$ of half thick Kersey att 3s. 3d.....	10s. 6d.
By a coverlid	1£ 0 0
By 16 yards of druggett att——— and a broom 3d.....	1£ 17s. 7d.
By 20 yds. black searge at 4s. 6d.....	4£ 10s.
By 20 yds. searge at 3s. 8d.....	3£ 3s. 4d.
By 3 yds. of buntin at 3d.....	3s. 3d.
By 18 $\frac{1}{2}$ yds. searge at $\frac{3}{8}$	3£ 7s. 10d.
By a hatt 5-6	5s. 6d.
By 53 yds. of cotton and linnin at 2-9	7£ 5s. 9d.
By $\frac{1}{2}$ doz. of ? a carpett 30	2£ 14s. 0
By 7 hatts att 5-3d.....	1£ 16s. 9d.
By 4 yds. searge at ?	2£ 4s.
By 2 ditto at ?	1£ 10s.
By 4 yds. black searge	18s.
By searge	8£ 19s. 4 $\frac{1}{2}$ d.
By 34 yards searge at 3s. 9d.....	6£ 7s 6d.
By 24 yards searge at ?	6£

Thus the total earnings of this Boston woman engaged in cloth making must have been for the three years considerably more than £50.³⁶ That such work was common at this time, cannot be questioned. In Salem, the records show that in 1685 John

³⁶ I have not attempted to estimate this with greater exactness because two or three of the entries seem inconsistent and may be due to a misreading of the manuscript (an old account-book in the manuscript collections of the Boston Public Library which was often quite illegible). Two or three of the entries are in her husband's name; they may have worked together or he may merely have acted for her.

Wareing was loaned money "to pay spinners."³⁷ Other account-books from the same period show similar credits.³⁸ The book from which Mrs. Avery's account is quoted contains names of several other women paid for the same kind of work, but no record compares with hers in interest.

The eighteenth-century account is one taken from the credit side of a merchant's book for 1781³⁹ and shows the earnings for the year of a "spinner," Theodora Orcutt, evidently, from her purchases, a wife and mother.

1781.			£ s. d.		
September	By spinning	11	Runs ⁴⁰ at 7/4—3 runs 7d	0	9 1
February	11 " "	4	" for handkerchiefs	0	2 4
March	2 " "	8	" linen yarn at 7d	0	4 8
"	" "	5	" tow "	0	2 8
"	6 " "	1	Run fine tow " "	0	0 7
"	13 " "	2	Runs woolen yarn	0	1 4
April	8 " "	13	" tow " at 8d	0	6 11
"	" "	14	" linen " "	0	9 4
"	29 " "	9½	" fine tow " "	0	6 4
May	13 " "	2	" " thread for stockings at 8d	0	1 4
"	" "	4	" tow yarn at 8d	0	1 4
"	" "	3	" coarse tow yarn at 4/ (O. T.)	0	1 7
"	" "	3	" " linen " at 6d	0	1 6
June	19 " "	8	" fine yarn for Lawn	0	8 0
"	" "	22	" coarse linen yarn at 6d	0	11 0
"	24 " "	2	" linen yarn at 8d	0	1 4
July	5 " "	10	" tow " " 4/ (O. T.)	0	10 4
"	9 " "	3½	" " " " " "	0	1 10
"	11 " "	10	" " " " 6d " "	0	5 0
July	25 " "	3	" fine linen yarn at 8d	0	2 0
"	" "	2	" coarse " " 6d	0	1 0
"	" "	2	" fine tow " 8d	0	1 4
"	31 " "	1	Run " " " 8d	0	0 8
August	24 " "	19	Runs coarse linen chain	0	9 6
September	11 " "	9	" " tow yarn	0	1 0
	" "	2	" sent to Miss Graves	}	0 6 5
	" "	4	Runs tow By Do 8 Runs tow		
				£5	4 10

³⁷ Felt, *Annals of Salem*, Vol. II, p. 159.

³⁸ There are several of these in the collections of the Essex Institute; and see Weeden, *op. cit.*, Vol. I, p. 305.

³⁹ This account is copied from Temple's *History of Whately*, pp. 71, 72.

⁴⁰ "A 'run' of yarn consisted of 20 knots. A 'knot' was composed of 40 threads, and a thread was 74 inches in length or once round the reel. A 'skein' of yarn

This account⁴¹ of Theodora Orcutt is of special interest because it shows how many different kinds of yarn had a marketable value at this time and how much women must have earned by trading at country stores entirely apart from the demand for yarn which came directly from weavers and the small "manufactories." There must have been too at this time a great deal of spinning and weaving done as custom work.⁴² It is important to know that while the itinerant and other professional weavers mentioned in the early records are almost invariably men,⁴³ yet consisted of 7 knots. An ordinary day's work was 4 skeins when the spinner carded her own wool; when the wool was carded by a merchant, she could as easily spin 6 in a day." See Temple, *op. cit.*, p. 71.

⁴¹ Another interesting account of the same period is found quoted in Bagnall, *op. cit.*, p. 173.

"Agreed with Mrs. Susannah Shepard of Wrentham, to make her a chaise for 55 £, she finding the harness, the wheels, leather for top and lining, remainder to be had in goods, at wholesale cash prices of her manufacture.

(Signed) STEPHEN OLNEY

PROVIDENCE,

November 13, 1795

Received of Mrs. Shepard on acc't of chaise.

5½ yards of thick-set at 4s. 8d.....	1 £ 5s. 8d.
2½ yards of velveret, at 4s. 8d.....	10s. 8d.
2¾ yards of satin bever, at 4s. 8d.....	12s. 10d.
1 yard & 2 nails of carpeting, at 3s.....	3s. 4½
13 yards carpeting	1 £ 18s. 7½
2 handkerchiefs	7s.
<hr/>	
	4 £ 18s. 2d.

⁴² Olive Moffatt, a descendant of the Scotch emigrants, was famous in one community for this sort of work. She was said to have been "employed by most of the well-to-do families in town in 1780, and for many years thereafter her loom was considered indispensable for wedding outfits. Her linsey-woolsey cloth was inimitable for evenness of texture; and she had a pattern of linen damask that no one else in town could weave; . . . and what was of special consequence at the earlier date, she understood perfectly how to color the fine lamb's wool yarns with madder. All the housewives knew how to use logwood and indigo, but it required peculiar tact to get the right shade of red. Olive would never spin over four skeins of fine linen thread even in the longest day, and would charge 6d. and 7d. per skein. Of fine woollen she would spin four skeins and charge 3d. per skein or 8d. per 'run.' When she felt 'just like it' she could weave three and one-half yards of yard-wide cloth; but commonly 3 yards was a day's work." Temple and Sheldon's *History of Northfield*, p. 341.

⁴³ In England also, the men did the weaving, but "spinning and the pre-

weaving by women was by no means rare even in the early days⁴⁴ and as the cloth manufacture developed it became common enough. And finally it should be said that this household spinning and weaving, more particularly the latter, continued well on into the nineteenth century.⁴⁵

There were two other household manufactures of considerable importance which belong properly within the classification "textiles." Lace was made in large quantities after this fashion. About 1790 not less than 41,979 yards were produced annually in Ipswich alone, and sold both for export and domestic use.⁴⁶ The most tedious part of the making of cards for combing cotton and wool was done by women in their homes. Toward the close of the eighteenth century this industry became a well-organized and important one. New machinery was introduced for cutting the leather and making—even cutting and bending—the wire for the teeth. The teeth and cards were then distributed and the women and children in the neighborhood worked at "setting teeth," which were inserted separately by hand. In some places,

liminary processess of cleaning, carding, and roving were conducted in the early times by the women and children," Chapman, *The Lancaster Cotton Industry*, p. 12.

⁴⁴ An extract from an old account-book, for example, shows a credit to "Sarah Badkuk (Babcock) for weven and coaming wistid," Weeden, *op. cit.*, Vol. I, p. 301. See also *ibid.*, Vol. II, p. 855. Mrs. Holt's receipt for 1 £ 5s. 11d. for spinning 72 skeins of yarn and weaving 19 yards of cloth is a relic in Bailey's *History of Andover*, p. 578. In the Moravian settlement in Pennsylvania, the light weaving was entirely "women's work" (Bagnall, *op. cit.*, p. 27), and Virginia cloth was described as "having been made of cotton and woven with great taste by the women in the country parts." (Bishop, *op. cit.*, Vol. I, p. 343).

⁴⁵ See Gallatin's Report of 1810, *American State Papers, Finance*, Vol. II, pp. 427, 428, and *Documents Relative to the Manufactures of the United States (Executive Documents, First session, Twenty-second Congress, Vols. I and II, passim)*, a manuscript volume in the collections of the American Antiquarian Society at Worchester, Massachusetts, called "Mrs. Lincoln's Book" contains interesting evidence of custom work during the years about 1820. In the period 1812-23, Slater attempted in his Webster factory to introduce his yarn for weaving into cloth by consigning it to country traders who introduced it among farmers' and mechanics' wives and daughters. Holmes Ammidown's *Historical Collections*, Vol. I, p. 493.

⁴⁶ W. Winterbotham, *View of the United States of America* (New York, 1796), Vol. II, p. 167.

whole families were dependent on this work as their only means of support.⁴⁷ In Boston a single factory employed in 1790 more than 1,200 women and children.⁴⁸

By way of summary, it may be said, with regard to this home work, that in the seventeenth and eighteenth centuries women were gainfully employed in many different processes of manufacture in their own homes. The development of the factory system has meant the opportunity to perform the same work more efficiently outside of the home, but the woman has been an essential factor in the industry in either case. Colonial cloth making was largely dependent upon women's labor and the textile manufactures of the nineteenth century could hardly have been carried on either at the beginning or at the close of the period without the work of the woman factory operative. Moreover, while the precise work that women did in the early household manufactures has now left the home, hundreds of thousands of "women in industry" today work after the same methods. To the manufacture of cards and much of the spinning and weaving in the eighteenth century, for example, modern tenement work may be traced as a lineal descendant. The women went to the "factory" for their materials, did their work at home, and returned the finished product—precisely what the women in the sewing-trades are doing a hundred years later. In so far, of course, as the spinners and weavers furnished their own material and disposed of their own product as custom work, they were true handicraftsmen belonging to a system that has not survived to any extent in modern industry. But when the product was disposed of at the country store, the essential element of handicraft, "custom

⁴⁷ Greene's *History of East Greenwich*, p. 58; see also Washburn, *Manufacturing Industries of Worcester*, p. 19.

⁴⁸ "Topographical and Historical Description of Boston," *Massachusetts Historical Society Collections*, First Series, Vol. II, p. 279.

Women were paid by the dozen for these cards but I have not been able to discover at what rate. Levasseur seems to have assumed that because these women were employed by the factory, they were employed in the factory, but this is undoubtedly an error. The machinery invented before 1797 seems none of it to have done the work of setting teeth. For an account of these machines see Bagnall, *op. cit.*, p. 154.

work," was lacking. All of this is important only as a means of showing that there were before the factory system appeared "women in industry" who bore much the same relation to the industrial organization as do many of the "women in industry" today.⁴⁹

2. The industrial employment of women outside of the home during the seventeenth and eighteenth centuries though not common was by no means unknown. Occasionally a woman ran a mill,⁵⁰ carried on a distillery,⁵¹ or even worked in a sawmill;⁵² and in 1693 a woman appears with two men on the *Boston Town Records* "desiring leave to build a slaughter house." But all of these seem to have been unusual employments.

In the eighteenth century there were, however, a great many women printers—the states of Massachusetts, Connecticut, Rhode Island, Pennsylvania, New York, Maryland, Virginia, South Carolina, each had one or more of them. These women were both compositors and worked at the press.⁵³ Several colonial newspapers were published by women and they printed books and pamphlets as well. Margaret Draper of Massachusetts "printed" for the governor and council;⁵⁴ in South Carolina a woman was appointed printer to the state after the close of the war;⁵⁵ and Benjamin Franklin's sister-in-law at Newport, in

⁴⁹ The census unfortunately gives no clue which will enable one to estimate the extent of home work today. In 1901 there were in the city of New York alone 21,077 women so engaged (*Report New York Bureau of Labor*, 1902, p. 46).

⁵⁰ See *Plymouth Colonial Records*, Vol. II, p. 76: "Mrs Jenney upon the presentment against her promisetht to amend the grinding at the mill, and to keepe the mortars cleane, and baggs of corne from spoyling and looseing." And see Weeden, *op. cit.*, Vol. I, p. 310, for note of a woman who had a bolting mill and bolted flour for her neighbors.

⁵¹ Felt, *Annals of Salem*, Vol. II, p. 167.

⁵² "Eight Dames and twenty-two women" were employed in Mason's settlement at Piscataqua in sawing lumber and making potash, Weeden, *op. cit.*, Vol. I, p. 168.

⁵³ Isaiah Thomas, *History of Printing in America* (*Archaeologia Americana*, Vols. V and VI), Vol. I, *passim*.

⁵⁴ *Ibid.*, Vol. I, p. 176.

⁵⁵ *Ibid.*, p. 343.

Rhode Island, printed for the colony, supplied blanks for the public offices, published pamphlets, and in 1745 printed for the government an edition of the laws, containing 340 folio pages. Her two daughters who assisted her in printing were said to have been "correct and quick compositors at case."⁵⁶ Printing⁵⁷ and work in the early factories bore a very close resemblance, indeed, to the modern employments "without the home" for women in industry. The manufacture of hand-cards, which employed so many women at home, furnished an occupation for some of them, too, in factories, examining the cards that were returned and correcting the imperfect work.⁵⁸ Women were employed in the early paper mills both in Pennsylvania⁵⁹ and Massachusetts,⁶⁰ but the cloth manufacture was the most important one in this group. Of the few factories that existed before 1800, it is necessary to distinguish (1) so-called "manufactories," where cloth was made, but where neither the new machinery nor power was used; and (2) the first cotton mills in which machines were successfully employed. It is important to know that both in the early "manufactories" and the early mills women found a place.

Perhaps the best illustration of an industry of the first sort is the sail duck manufactory established in Boston in 1788. In that year the *Boston Centinel* noted that the "manufactory of sail cloth and glass" would soon be completed and "give employment

⁵⁶ *Op. cit.*, p. 195.

⁵⁷ In a general note, written for the second edition in 1815, Dr. Thomas (Vol. II, p. 365) says: "There have been many instances of women performing the work of the printing house. The nieces of Dr. Franklin in Newport were expert compositors and so it is said were the daughters of Mr. D—H—, of Philadelphia. Mr. Wm. McCullough . . . informs me that he saw in a printing house near Philadelphia, two women at the press who could perform their week's work with as much fidelity as most of the journeymen. As compositors, women and girls have not unfrequently been employed, not only in America, but in Europe. . . ."

⁵⁸ Greene, *History of East Greenwich*, p. 58.

⁵⁹ Duke de la Rochefoucauld-Liancourt, *Travels through North America*, Vol. II, p. 258. These women received a dollar a week in 1797.

⁶⁰ E. B. Crane, "Early Paper Mills in Massachusetts," *Collections Worcester Society of Antiquity*, Vol. VII, pp. 121, 127. "Ordinary workmen and girls" earned \$0.75 a week and found.

to a great number of persons especially females who now eat the bread of idleness.”⁶¹ In 1789 a New York paper⁶² in describing the factory referred to the fact that “sixteen young women and as many girls under the direction of a steady matron are here employed;” and later in the year when Washington visited the establishment, his diary records that he saw there “girls spinning with both hands” and with smaller girls to turn the wheels for them.⁶³

In the Beverly cotton factory, the original prototype of the modern cotton mill, there were forty employees⁶⁴—both men and women. In a letter written in 1790 by one of the proprietors,⁶⁵ complaint is made that both the Worcester and Rhode Island “undertakers” had bribed the Beverly women that had been taught to use the machines to leave at a time when they were most needed—an interesting letter because it indicates that Beverly was not the only place where the women operated the first machines. Samuel Slater’s time list for 1790, the first year his factory was in operation, has been preserved and shows that women or girls were among his carders and spinners at that time,⁶⁶ and as this factory was only a spinning mill, the employees from the first were almost exclusively children or women.⁶⁷

⁶¹ *Boston Centinel*, September 6, 1788, quoted Bagnall, *op. cit.*, p. 113.

⁶² *Gazette of the United States*, May 6, 1789, quoted *ibid.*, p. 114.

⁶³ See Bagnall, *op. cit.*, p. 151. This factory had in 1792 four hundred employees, but it has been impossible to ascertain whether or not all of them were employed on the premises. Records of these early factories are extremely difficult to find, but there can be no doubt that women were employed in most of them and that the Boston sail duck “manufactory” was typical of many. Some of them were equipped only with looms, while others carried on all of the processes of cloth manufacturing, and in these women were probably employed in various capacities. Thus an advertisement in a Maryland paper asks that application be made “to the subscriber at the Factory where a few women can be employed winding yarn.”

⁶⁴ Rantone, “The First Cotton Mill,” *Collections of Essex Institute*, Vol. XXXIII, p. 40.

⁶⁵ “George Cabot to Benjamin Goodhue,” *ibid.*, p. 37.

⁶⁶ White’s *Memoirs of Slater*, p. 99.

⁶⁷ In the early factory with which Moses Brown experimented before Slater’s arrival, the billies and jennies were driven by men, but “the cotton for this experiment was carded by hand and roped on a woolen wheel by a female” (Batchelder, *History of the Cotton Industry*, p. 19).

Another interesting factory of the period was Dickson's at Hell Gates near New York. When Henry Wansey, an English manufacturer, visited it in 1794 he found a good equipment in the way of machinery, and noted that "they are training up the women and children to the business of whom I saw twenty or thirty at work."⁶⁸ The same factory advertised in 1793 for "apprentices either girls or boys" who "will be found in everything during their apprenticeship and taught the different branches of the cotton business."⁶⁹

It ought to be emphasized, before passing on to a study of the statistics of factory employment, that there was no initial "displacement" of men by women with the inauguration of the factory system. Spinning had been from the beginning exclusively "women's work" and until after 1814, when the power loom was introduced, factory operations "were confined to spinning yarn only which was put out in webs and woven by hand loom weavers."⁷⁰ The fly shuttle was in common use at this time and women seem to have been more and more frequently employed as weavers,⁷¹ thus helping to meet a very great increase in the demand for such work. Trench Coxe in his *Digest of Manufactures* prepared in 1814 calls attention to the fact that "women, relieved in a considerable degree from their former employments as carders, spinners, and feeders by hand, occasionally turn to the occupation of the weaver with improved machinery and instruments, while the male weavers employ themselves in superintend-

⁶⁸ *Journal of an Excursion to the United States* (1796), p. 107. "They give the women two dollars a week and find them in board and lodging."

⁶⁹ Bagnall, *op. cit.*, p. 187. See also "boys and girls" advertised for by the Livingston factory at New Haven, *ibid.*, p. 192.

⁷⁰ See Letter from Smith Wilkinson, White's *Slater*, p. 106.

⁷¹ An interesting bit of evidence regarding the increase in the employment of women at this time is found in Washburn's *Historical Sketches of the Town of Leicester* (Boston, 1860), p. 30. One of the early clothiers of the town enlarged his shop in 1814 and began the manufacture of woolen cloth. "His weaving was done by hand and the employment of men in what had been before regarded as within the peculiar province of females in the arrangement of household affairs was looked upon, by those who were not familiar with the processes of manufacture elsewhere, in something the same light in which people would now regard a man mantua maker or milliner."

ence, instruction, superior or other operations and promote their health by occasional attentions to gardening, agriculture, and the clearing and improvements of their farms.”⁷² The “Weaver’s Book,”⁷³ which contains the record of yarn taken, cloth returned, and payments made to persons who wove for the Poignaud and Plant Factory in Lancaster, shows that more than one-third of the weavers employed at this time were women. There seems then to have been something of a readjustment of work after the new machinery came into use. With the growth of the cloth-making industry, there was room for the employment of so many more persons that there was no real displacement either of men by women or of women by men, but, so far as women were employed in weaving, a large proportion of them were doing work that would, on the basis of the old system, have been done by men; so far as men were employed as spinners—and the mule spinning was done at that time chiefly, as it is now done exclusively,⁷⁴ by men—they were doing what had been considered women’s work from time immemorial. It should be emphasized that the earliest factories offered no new occupations to women. So long as they were only “spinning-mills” there was merely a transferring of women’s work from the home to the factory, and by the time that the establishment of the power loom had also made weaving a profitable factory operation, women had become so largely employed as weavers that they were only following this occupation, too, as it left the home.⁷⁵

⁷² *American State Papers, Finance*, Vol. II, p. 676.

⁷³ A manuscript volume in the collection of *Poignaud and Plant Papers* in the Town Library in Lancaster, Massachusetts. The writer is under obligation to Mr. J. C. V. Clark, the town clerk, for many kindnesses in connection with the consultation of these papers.

⁷⁴ Carey estimated, on the basis of Baines’s English statistics, that three-fourths of the mule spinners were men and three-fourths of the throstle spinners women. The more general use of throstle spinning in this country, he thought, was an explanation of the larger proportion of women employed here. H. C. Carey, *Essays on the Rate of Wages* (Philadelphia, 1835), p. 75.

⁷⁵ “In New England, household manufacture is almost entirely discontinued and female labor has been transferred to factories.”—“Documents Relative to the Manufactures of the United States,” *Executive Documents*, First Session, Twenty-second Congress, Vol. I, p. 969. Professor Cunningham says with

In conclusion, it should be said that no attempt has been made to make factory work appear to have been an important employment for women at this time—and such an attempt would be necessarily absurd. What has been attempted is to show the relation of women to our early industrial organization. A study of women in industry during these early centuries indicates very clearly that the presence of women in our factories is nothing abnormal or artificial; neither is it a result of the displacement of men or the taking-over of that which was “men’s work.” It is, on the contrary, the natural result of our industrial evolution in which the development and perfection of the machine system have necessitated the substitution of factory processes for household production. And what ought to be clearly understood is that in all stages in the development of our modern manufacturing industries, women have been not only a factor, but an important and indispensable factor. Certainly so far as the textile manufactures are concerned, it is the “men in industry” who are interlopers—not the women.

PART II. STATISTICS OF WOMEN IN “MANUFACTURES,” 1810-1900

For the nineteenth century, the question that must be squarely raised to be answered by a study of the early industrial statistics is: Did women, in 1900, form a larger or smaller proportion of the total number of persons employed in “manufactures” than they did in the first half of the century? The question must be asked as well of each of several important industries individually, for the proportion of women may have increased in some particular industries, if not in the group as a whole. It is obvious, of course, that any study of the relative numbers of men and women employed in factories must begin with nineteenth century and with the cotton industry. While the first factories were built before 1800, the total number of persons employed in them was

reference to the English situation: “The kinds of labor needed were not very different from those required in the old days of handspinning and carding, but girls and women were concentrated in factories to tend the machines instead of spinning with their wheels in cottages.”—*History of English Industry and Commerce, Modern Times*, Part II, p. 626.

very small and it was not until the years 1806-7 that the cotton manufacture began to assume any considerable proportions.⁷⁶ In 1810 returns from eighty-seven mills were received by Secretary Gallatin before he published his *Report on Manufactures*, and, on the basis of the data furnished, he estimated that in 1811 the cotton mills of this country would employ 500 men and 3,500 women and children.⁷⁷ At the close, then, of this first decade, women and children formed 87.5 per cent. of the total number of employees. In 1814 Trench Coxe, in the *Digest of Manufactures* prepared for the secretary of the treasury, said, in discussing possibilities for the industry, that about 58,000 persons would produce fifty million pounds of yarn, and "of these no more than one-eighth part ought to be adult males; the remaining seven-eighths might be women and children."⁷⁸ But a more satisfactory statement of the employment of women is found in the *Report*⁷⁹ of the Committee and Manufactures, in 1816 in the form of the following table:

⁷⁶ "Prior to the years 1806-7 establishments for manufacturing cotton wool had been attempted, but in few instances and on a limited scale." In 1800, 500 bales of cotton were manufactured in manufacturing establishments; 1,000 in 1805; 10,000 in 1810; 90,000 in 1815. See the "Report of the Committee on Protection of Manufactures," *American State Papers, Finance*, Vol. III, p. 82. Slater's factory at Providence employed nine spinners, seven men and two women, in 1791. White's *Memoir of Slater*, p. 99.

⁷⁷ Gallatin's estimate was based on a theory that 800 spindles employed 40 persons, 5 men and 35 women and children (*American State Papers, Finance*, Vol. II, p. 427). One cotton factory near Providence reported that on August 31, 1809, there were employed in this factory 24 men and 29 women; in neighboring families, 50 men and 75 women (*ibid.*, note D). That is, in this factory 54.7 per cent. of the number of persons employed in the factory and 58.4 per cent. of all the employees were women.

⁷⁸ *Digest of Manufactures submitted to the Senate*, January 5, 1814, Vol. II, p. 669. He estimated also that 100,000 women, "less than one-sixth of our adult females," might with perfect ease weave all of this yarn with the fly shuttle. As the records of a smaller factory, statistics of the Poignaud and Plant factory are worth quoting: "In 1813 the spinning-factory employed seven women and one man, the latter evidently an overseer; in 1817, seventeen women and two men; and in 1818, twenty-four women and three men" (Manuscript Time Books among *The Poignaud and Plant Papers*).

⁷⁹ *American State Papers, Finance*, Vol. III, p. 82.

Males from 17 up	10,000
Women and female children	66,000
Boys under 17	24,000

The substitution of the classification "women and girls" instead of "women and children" makes this estimate much more useful for the purpose in hand than the earlier ones. While the number of persons employed is very greatly exaggerated, the relative numbers of men and women are probably correctly estimated, and, roughly speaking, two-thirds of the employees were women. Another attempt at a "Digest of Manufacturing Establishments" was made by Secretary John Quincy Adams in 1822,⁸⁰ but the results were so unsatisfactory that no summary was prepared. Tabulating all of the returns, however, for the various manufactures of cotton wool, it appears that 2,160 men, 2,980 women, and 6,290 children were employed in them. The age-limit for children is unfortunately not given. But of the total number of employees as classified, 81.1 per cent. were women and children; and of the number of men and women, 57.9 per cent. were women.

No other estimate of the number of cotton-mill operatives was made for the whole country until 1831, but a few interesting records of individual mills are preserved. At the Waltham factory in 1819, there were 14 men and 286 women and children.⁸¹ A factory at Fishkill on North River had from seventy to eighty employees, five-sixths of whom were women and girls.⁸² The Poignaud and Plant factory at Lancaster had in 1833, thirty-five women, five men, and an overseer; and in 1825, thirty-nine women, seven men, and an overseer.⁸³ In the factories at New Market, New Hampshire, 250 girls, five boys, and twenty overseers and assistants composed the working force in 1827.⁸⁴ In the same year, Kirk Boott prepared a statement showing that six Lowell mills employed 1200 persons, "nine-tenths of those females, and

⁸⁰ *Op. cit.*, Vol. IV, p. 28.

⁸¹ M. Carey, *Essays in Political Economy* (Philadelphia, 1822), p. 162.

⁸² *Ibid.*, p. 459.

⁸³ *Time Books, Poignaud and Plant Papers* (*ante*, note 73).

⁸⁴ White's *Memoir of Slater*, p. 134.

twenty from twelve to fourteen years of age.”⁸⁵ It is also of interest to know that the proportion of women employed in our cotton mills was not very large, but that it was considerably larger in this country than in England. There the number of women was only about 9 per cent. greater than the number of men employed, while in this country it was about 110 per cent. greater.⁸⁶ From 1831 to the present time, reasonably satisfactory statistics are available which show for every decade the relative numbers of men and women operatives, and for convenience these, with the two most useful of the earlier estimates, have been incorporated in the following table.

A study of this table shows that the proportion of women employed has been steadily decreasing since the beginning of the third decade—if we except the statistics for 1837 and 1845 which relate only to Massachusetts. In 1830, there were two women to every man employed; in 1900, there were more men than women. In 1831, the women formed 67.7 per cent. of all the cotton-mill operatives, and in 1900, only 48.9 per cent. While the earlier and later statistics are not in many ways comparable, yet inaccuracies in the earlier returns are not likely to have altered the proportions of men and women employed. In so far as these proportions are affected by error, they probably indicate a smaller per cent. of women than really existed, for one of the common results of carelessness is to report only the number of employees without a sex designation and such returns are likely to be entered

⁸⁵ *Ibid.*, p. 253.

⁸⁶ H. C. Carey's *Essay on the Rate of Wages* (Philadelphia, 1835), pp. 71, 72. The statement is made on the basis of statistics for 1831 in this country. Carey says, by way of comment: "The great disproportion that exists between the two countries in the employment of male and female labor cannot fail to strike the reader. . . . At first sight it might be supposed that this would cause wages to be lower here, the labor of men being generally more productive than that of women. . . . Such is not, however, the case, women being employed here because everything is done to render labor productive while there a large proportion of the power of the male operatives is wasted." The statement is also made in White's *Slater*, p. 167, that "the perfection to which machinery is brought enables the proprietor to avail himself more extensively of female labor than is the case in Europe. The labor of the females is much more productive and they consequently receive higher wages."

TABLE SHOWING THE NUMBERS OF MEN AND WOMEN EMPLOYED
IN AMERICAN COTTON FACTORIES DURING THE LAST CENTURY

	NUMBER OF EMPLOYEES		No. Women Employed to Every Male Employee	Per cent. Which Women Formed of the Total No. Em- ployees
	Men	Women		
1811 ⁸⁷	500	3,500†	7.00	87.4†
1816 ⁸⁸	34,000	66,000	1.94	66.0
1831 ⁸⁹	18,538	38,927	2.09	67.7
1837 ⁹⁰ *.....	4,997	14,757	2.95	74.7
1845 ⁹¹ *.....	6,303	14,407	2.28	69.5
1850 ⁹²	33,150	59,136	1.78	64.0
1860.....	46,859	75,169	1.60	61.5
1870.....	47,208	64,398	1.36	57.7
1880.....	78,292	91,479	1.16	53.8
1890.....	80,177	92,965	1.15	53.4
1900.....	125,788	120,603	0.95	48.9

* For Massachusetts only.

† Women and children.

under "men employed." Beyond any doubt whatever is the diminution in the proportion of women operatives since 1850, when they formed 64.7 per cent. of the total number of employees—a percentage that has since fallen to 48.9. In 1831, 111.2 women out of every 10,000 women over ten years of age in the United States were working in the cotton mills; in 1850, only 85.2 out of every 10,000 women were so employed; and in 1900,

⁸⁷ From Gallatin's "Report on Manufactures," *American State Papers*, Finance, Vol. II, p. 427.

⁸⁸ From "Report of the Committee on Commerce and Manufactures," *ibid.*, p. 82.

⁸⁹ From the "Report of the Committee on Cotton," *Address and Proceedings of the Convention of the Friends of Domestic Industry at New York, 1831* (Baltimore, 1831), p. 112.

⁹⁰ From *Statistical Tables Exhibiting the Condition and Products of Certain Branches of Industry in Massachusetts for the Year Ending April 1, 1837* (Boston 1838).

⁹¹ From *Tables of the Condition and Products of Certain Branches of Industry in Massachusetts for the year ending April 1, 1845*.

⁹² Statistics for 1850-1900 are all from the federal census. In 1850, the census did not report the number of women employed but a later "abstract" from the returns was published, giving the numbers of each sex in all manufacturing industries. *Senate Documents*, Thirty-fifth Congress, second session, Vol. X. The figures for this table, however, are the corrected ones from the "Manufactures," *Twelfth Census*, Vol. III, p. 32.

but 46.2. In Massachusetts throughout the whole period a leading cotton manufacturing state, 455 out of every 10,000 women over ten were in cotton factories in 1831; in 1900, the number had fallen to 282.1.

This tendency toward a diminution in the proportion of women employees is the more remarkable because it is to be observed, as the following table indicates, in several other industries which employ large numbers of women.

TABLE SHOWING THE PROPORTION OF WOMEN EMPLOYED IN FIVE OTHER INDUSTRIES

	PERCENTAGE WHICH WOMEN FORMED OF THE TOTAL NO. OF EMPLOYEES IN				
	Woolen Mills ⁹⁷	Silk Mills	Boots and Shoes ⁹⁸	Paper Mills	Printing
1831 ⁹³	44.0	50.4	54.6
1837 ⁹⁴	49.1	67.8	39.3	51.5
1845 ⁹⁵	47.0	82.0	40.7	57.7
1850 ⁹⁶	42.9	70.8	31.3	43.4	16.3
1860	39.7	70.8	23.1	40.2	11.1
1870	38.6	70.7	5.6	31.1	3.7
1880	40.3	50.9	10.8	31.3	4.7
1890	43.3	59.2	15.7	32.2	9.9
1900	41.8	59.5	18.9	25.9	10.3

⁹³ Data for this year are from *Documents Relative to the Manufactures of the United States*, collected and transmitted to the House of Representatives in compliance with a resolution of January 19, 1832. The data used relate only to the states of Massachusetts and Connecticut for paper, to the state of Connecticut alone for woolen mills, and only to the town of Lynn, Massachusetts, for boots and shoes; for other localities, data were, if not entirely lacking too fragmentary or questionable for use.

⁹⁴ All data for this year for Massachusetts only, except silk mills. The estimate for this industry is based on statistics for the entire country, represents "women and children" and is for the year 1840. (Mac Gregor's *Progress of America*, Vol. II, p. 663.) The percentage is probably an exaggerated one. Data for other industries from *Tables of Industry*, *loc. ante*, note 91.

⁹⁵ For Massachusetts alone, from data in *Statistical Tables for Massachusetts*, *op. cit.* The paper industry is represented by a single factory.

⁹⁶ From 1850-1900, all estimates based on federal census statistics.

⁹⁷ "The wool business requires more man labor and this we study to avoid." Extract from a letter of 1827 in White's *Slater*, pp. 131, 132.

⁹⁸ The earlier and recent statistics for this industry are not fairly comparable, for they cover the period of the transition to the factory system. In 1860 this transition was still in progress and the census for that year says: "Although of quite recent introduction in this branch of industry, its [the sewing machine's]

This table shows clearly that the tendency observed in the cotton mills is not an isolated one. In five other important industries for women the same decrease is to be noted and in each the point of depression seems to have been reached about 1870. Outside of the sewing trades,⁹⁹ there were, in 1900, ten industries each of which employed more than 1 per cent. of the total number of women shown by the census to be engaged in "manufacturing and mechanical pursuits": Boot and shoemaking, bookbinding, boxmaking, "cotton-mills," "hosiery and knitting mills," printing, shirt, collar, and cuff factories, "silk mills," manufactures of tobacco and cigars, and "woolen mills." It has already been shown that five of these industries employed a smaller proportion of women in 1900 than in earlier periods. For the other five, statistics can with one exception be obtained from 1850 to 1900, and for that half-century they show an opposite tendency, a gradual, though not striking, increase in the proportion of women employees.

TABLE SHOWING PROPORTION OF WOMEN IN THE REMAINING FIVE IMPORTANT INDUSTRIES FOR WOMEN

	PERCENTAGE ¹⁰⁰ WHICH THE WOMEN FORMED OF ALL EMPLOYEES IN				
	Book-Binding	Book-Making	Hosiery and Knitting Mills	"Shirts, Collars and Cuffs"	"Tobacco and Cigars"
1850	48.7	*57.7	64.0		13.8
1860	57.1	*68.0	69.4	97.2 ¹⁰¹	13.8
1870	29.9	*36.6	54.4	68.9	10.2
1880	39.6	*45.2	64.4	73.2	14.1
1890	48.0	73.4	70.4	75.6	25.0
1900	51.6	82.0	73.1	78.4	33.0

* Box makers (wood) were included in statistics for these years—an explanation in part, no doubt, of what seems like a very great increase in the proportion of women employed.

employment is gradually bringing about a silent revolution in the boot and shoe manufacture which is daily assuming the characteristics of a factory system."—*Eighth Census*, "Manufactures," p. lxxi.

⁹⁹ This term is used to include "milliners" as well as "dressmakers," "seamstresses," and "tailoresses." Census statistics for these classes of workers are almost hopelessly confused; see comments in this *Journal* for January, 1906.

¹⁰⁰ All percentages in this table are based on statistics from the federal census.

¹⁰¹ The *Census of Manufactures for 1860*, p. lxxv, shows in a table headed "shirts,

All of the industries in the table, with possibly the single exception of "shirts, collars, and cuffs," show a tendency unlike that indicated in the first tables; but it must be noted that although they each employ at least 1 per cent. of the women in the "manufactures" group, yet they are of very unequal importance. The following table will make this point clearer:

TABLE SHOWING THE NUMBER OF WOMEN EMPLOYED IN EACH OF THE INDUSTRIES EMPLOYING AT LEAST 1 PER CENT. OF THE WOMEN IN THE "MANUFACTURES" GROUP

	No. women* in 1900 in Industries, Showing a Decreasing Proportion of Women Employed		No. women* in 1900 in Industries, Showing an Increasing Proportion of Women Employed.
Boots and shoes.....	39,510	Book-binding.....	15,632
Cotton mills.....	120,603	Box-making.....	17,302
Printing.....	15,981	Hosiery and knitting mills.....	34,490
Silk mills.....	32,437	Shirts, collars and cuffs	30,941
Woolen mills.....	30,630	Tobacco and cigars...	43,497
Total.....	239,161	Total.....	141,862

* All statistics for this table were taken from the *Twelfth Census* "Occupations," pp. cxxvi, cxxvii.

This table shows that in the group of the industries, each of which employs more than 1 per cent. of the women in manufactures, those industries which employ a smaller proportion of women now than they did 50 or 70 years ago are relatively much more important than those which show a contrary tendency, in fact twice as important numerically. But more valuable than such a comparison as this is a study of the statistics for "all industries" in the group "manufacturing and mechanical pursuits." Such statistics cannot be obtained for the period before 1850, but a table showing the changes of fifty years has been prepared:

collars, and men's furnishing goods," 528 men and 15,068 women employed. As a different classification was used in the four later decades I have not ventured to take the percentage for that year as comparable with later ones, and it is only given as indicating a possible condition.

TABLE SHOWING THE RELATIVE NUMBER OF MEN AND WOMEN
EMPLOYED IN "MANUFACTURING AND MECHANICAL
PURSUITS" FROM 1850 TO 1900

	No. Each Sex Em- ployed in Manu- factures	Per cent. Each Sex Formed of Total Num- ber Employed	No. in Manufac- turers out of Every 1,000 of Each Sex in Population over Ten Years
1850—			
Men	731,137	76.4	86.75
Women.....	225,922	23.6	28.32
1860—			
Men	1,040,349	79.4	90.25
Women.....	270,897	20.6	24.70
1870—			
Men	2,353,471	87.0	165.06
Women.....	353,950	13.0	25.33
1880—			
Men	3,153,692	83.4	168.32
Women.....	631,034	16.6	35.00
1890—			
Men	4,650,540	81.9	190.96
Women.....	1,027,928	18.1	44.57
1900—			
Men	5,772,641	81.5	194.34
Women.....	1,312,668	18.5	46.46

Again, as in tables for the first five industries, there is seen to be a smaller proportion of women employed in 1900 than in 1850; and again what may be called the point of depression is in 1870. This table must not be misunderstood to indicate that the number of women in "manufactures" is not increasing, for the third column shows that while in 1850 28 women in every 1,000 of the women in the country over ten years old found employment in manufacturing occupations, in 1900 eighteen more out of every thousand were engaged in them. But what the table does show is that within fifty years the number of men in "manufacturing and mechanical pursuits" has increased relatively much faster than the number of women, and that there is a very evident fallacy at the bottom of the popular superstition that the increase in the number of women employed in factories has meant "driving out the men." Against an increase of 18 in every 1,000 women must be set an increase of 108 in every 1,000 men. On the other hand, it is equally clear that women are not being "driven out," for attention has already been called to the fact that there has been

in every decade an increase in the number of women out of every 1,000 of the population who were found in this group.

A study of these statistics for the last half-century and of those indicating a similar tendency for a much longer period in the cotton industry, should, however, make clear two points of importance: (1) The futility of attempts to discover what the tendency regarding the industrial employment of women has been by selecting 1870, "the point of depression," as the basis of comparison with recent years. The last census caused much confusion on the subject by falling into precisely this error. The census statement—widely quoted—that "the proportion of women employed in manufactures is increasing more rapidly than that of men and children"¹⁰² is misleading, because it relates only to changes "during the thirty years" from 1870 to 1900. During this period the proportion of women employed has increased, but this increase has been far from enabling the women to recover the ground lost between 1850 and 1870 and a long-time point of view would have disclosed a tendency exactly the reverse of that indicated by the census; and (2) the necessity of discussing as separate questions or as distinct parts of the same question, the gainful employment of women in "manufactures," a group of occupations of working-class women, and the gainful employment of women in "trade and transportation" and "professional service" which include, broadly speaking, middle-class occupations. In the last seventy years, or even in the last twenty-five years, there has been a conspicuous broadening of the field of employment for middle-class women and a great increase in the number of such women employed;¹⁰³ while the increase for half

¹⁰² "Manufactures," I, *Twelfth Census*, p. cxxvi.

¹⁰³ In 1870, 1.6 per cent. of the employees in "trade and transportation" were women, and in 1900 the proportion had reached 10.5 per cent. For "professional service" the corresponding percentages were 24.8 in 1870 and 34.2 in 1900. While data for the decades preceding 1870 are not obtainable for these groups of occupations there can be no doubt that in the earlier periods these proportions were much smaller. An article in Hunt's *Merchant's Magazine*, in 1855, calling attention to the "employment of ladies as clerks in stores," quotes from the *Pittsburg Post*: "The *New York Times* is earnestly advocating the employment of females as clerks in stores—particular in all retail dry-goods stores. It is an employment for which they are well fitted, and would properly enlarge their sphere of action

a century in the number of women employed in manufacturing pursuits has been only 1.8 out of every 100 women in the population over ten years of age. The comparatively recent entrance of a relatively few women into professional or other similar work has been so conspicuous a fact as to lead to the belief that gainful employment was on a rapid increase among all classes of women,¹⁰⁴ while the truth is that women are now a relatively less important factor in industrial life than they were at the close of the first half of the last century.

PART III. THE EARLY ATTITUDE TOWARD "WOMEN IN INDUSTRY"

Another interesting phase of the history of women in industry is the change in the attitude of the public mind toward women's work. There was in the early days of the factory system no feeling of prejudice against the industrial employment of women, no jealous fear that they would "drive out the men," or that domestic life and the home would be ruined. And in the colonial period when it was feared "idleness would be the ruin of both church and commonwealth," the gospel of work was preached relentlessly to women of all classes.

In the seventeenth century, to be industrious was the chief of social virtues; early court orders directed that women, as well as men, be kept employed¹⁰⁵ and Puritan ministers warned them of and occupation and it is a business that they can do better than men. . . . It would give employment at good wages to a great many young ladies, and would be degrading to no one willing to earn a living."—Vol. XXXIII, p. 766.

¹⁰⁴ See the January, 1906, number of this *Journal*, p. 27, for a discussion of recent census statistics relating to women's work. It is pointed out that for the last decade "the increase in the gainful employment of women has been caused by an increase in the number of middle-class women who are becoming self-supporting." This statement merely follows a similar conclusion regarding the increase of gainfully employed women in England; see Miss Collet's *Report on the Statistics of the Employment of Women and Girls* (London, 1894), p. 871.

¹⁰⁵ A court order of May 13, 1640, in Massachusetts directed an inquiry into the possibilities of manufacturing cotton cloth, "what men and woemen are skilful in the braking, spinning, and weaving, . . . what course may bee taken for teaching the boyes and girles in all towns the spinning of the yarne," *Massachusetts Colonial Records*, Vol. I, p. 294. A similar order in 1656 calls upon every town to see that "the woemen, boyes and girles . . . spin according to their skill and abilitie."—*Ibid.*, Vol. III, p. 397.

the dangers of idle living.¹⁰⁶ Perhaps the best expression of the prevailing attitude toward the employment of women in this century is to be found in one of the province laws of Massachusetts Bay for the session of 1692-93. The law ordered that every single person under twenty-one must live "under some orderly family government," but added the proviso that "this act shall not be construed to extend to hinder any single woman of good repute from the exercise of any lawful trade or employment for a livelihood, whereunto she shall have the allowance and approbation of the selectmen . . . any law, usage or custom to the contrary notwithstanding."¹⁰⁷ It is not, therefore, surprising to find that in 1695 an act was passed which required single women who were self-supporting to pay a poll tax as well as men.¹⁰⁸ The employment of women was encouraged in the eighteenth century because it lessened the poor rates. The Boston "Society for Encouraging Industry and Employing the Poor" was organized in 1751 in the hope that it would be possible to "employ our own women and children who are now in a great measure idle;"¹⁰⁹ and in the year 1753, a tax on carriages was levied to support a spinning-school in order that women and children who

¹⁰⁶ See Winthrop's reference to the sermon of a Boston minister in 1636, *History of New England*, Vol. I, p. 186. Summary measures were sometimes taken to enforce industry. Thus the *Salem Town Records* show (December 5, 1643): "It is ordered that Margaret Page shall [be sent] to Boston Goale as a lazy idle loytering person where shee may be sett to work for her livinge" (p. 124). In 1645 (p. 140) and 1646 (p. 147) different persons were paid "for Margaret Page to keep her at worke." Among the charges against Mary Boutwell (*Essex Records*, 1640) is one "for her exorbitancy not working but liveinge idly."

¹⁰⁷ *Province Laws*, Vol. I, p. 539; *Re-enacted*, Vol. II, p. 183, 1054. The first newspaper in the country, which appeared about this time, contains an amusing bit of testimony regarding women's activities in the story of the old man who upon his wife's death "fell into melancholy;" the editor adds: "It is said his wife's discretion and industry had long been the support of the family!" ("Public Occurrences, September 25, 1690," in S. A. Green's *Ten Facsimile Reproductions*).

¹⁰⁸ *Province Laws*, Vol. I, p. 213: "All single women that live at their own hand, at two shillings, each, except such as through age, or extream poverty . . . are unable to contribute towards the publick charge;" men, however, of 16 years or upwards were rated "at four shillings per poll."

¹⁰⁹ Bagnall, *op. cit.*, p. 33.

were destitute and in danger of becoming a public charge might be made in some degree self-supporting.¹¹⁰ The New York linen "manufactory" was commended later because it had relieved "numbers of distressed women now in the poor house."¹¹¹ And in 1770 a memorial presented to the General Court of Massachusetts stated that because of the increasing number and expense of the poor, rooms had been engaged and spinning wheels set up "for employing young females from eight years old and upwards in earning their own support." Later Trench Coxe calls attention to the fact that the poor taxes in the United States are very small owing to the facility with which "every man, woman, and child can procure a comfortable subsistence."¹¹² In short, one of the ideals of the time as expressed in a current newspaper was to have "the women of the whole country employed as much as possible."¹¹³

It was not, however, merely the employment of women in their own homes, but the work outside of the home, that was encouraged. A petition in behalf of the Beverly Cotton Factory in 1789 states that "it will afford employment to a great number of women and children, many of whom will be otherwise useless if not burdensome to society."¹¹⁴ And a year earlier a factory in Boston received public approval because it promised "to give employment to a great number of persons, especially females, who now eat the bread of idleness."¹¹⁵

¹¹⁰ *Province Laws*, Vol. III, p. 680. A discussion of the "spinning craze" which followed this movement would be out of place here as being in no sense "gainful employment," but interesting information regarding it may be found in Bagnall, *op. cit.*, pp. 58-60.

¹¹¹ *Ibid.*, p. 52.

¹¹² Trench Coxe, *View of the United States of America* (1794), p. 438.

¹¹³ Quotation from a Pennsylvania paper, Bagnall, *op. cit.*, p. 70.

¹¹⁴ Bagnall, *op. cit.*, p. 91.

¹¹⁵ *Ibid.*, p. 113. The card "manufactory" in Boston at this time was said to be "very valuable" as it furnished employment for upward of one thousand women and children; see *Massachusetts Historical Society Collections*, First Series, Vol. III, p. 279. It is of interest, too, to find that it was thought worth noting with regard to a Philadelphia factory that "satisfactory testimonials have been adduced of the good behavior of the women and children." Bagnall, *op. cit.*, p. 355. In all of these cases, part of the work done by the women was work in

After the establishment of the new government in 1789, the economic ideal of the statesmen of the time was the development of the national resources—the formation of a policy for obtaining the maximum utility, not only from our territory, but from our population. It was logical, therefore, for Hamilton to argue that one great advantage in the establishment of manufactures would be “the employment of persons who would otherwise be idle. . . .” In general, he said, “women and children are rendered more useful by manufacturing establishments than they otherwise would be.” He also pointed out that “the husbandman himself [would experience] a new source of profit and support from the increased industry of his wife and daughters, invited and stimulated by the demands of the neighboring manufactories.”¹¹⁶ In 1794 when Trench Coxe found it necessary to reply to the argument that labor was so dear as to make success in manufactures impossible and that the pursuit of agriculture should occupy all our citizens,¹¹⁷ he at once called attention to the fact that the importance of women’s labor must not be overlooked, since its most profitable employment would be found in manufacturing industries, and “the portions of time of housewives and young women which were not occupied in family affairs could be profitably filled up;” finally, he said, the objection that population would be taken from agriculture “is not solid . . . since women, children, horses, water and fire, all work at manufactures. . . .”¹¹⁸ And in the early part of the last century, a new factory was called a “blessing to the community”¹¹⁹ because, among other reasons, it would furnish employment for the women of the neighborhood. Later it was said that women were “kept out of vice simply by being employed and their own homes for the factory, but their employment seems to have been indifferently commended, whether in the home or away from it.

¹¹⁶ “Report on Manufactures, 1791,” *American State Papers, Finance*, Vol. I, p. 84.

¹¹⁷ Coxe, *View of the United States of America* (Philadelphia, 1794), p. 55.

¹¹⁸ *Ibid.*, p. 301. See also Coxe, *Reflections on the State of the Union* (1792), p. 8.

¹¹⁹ *History of Dorchester by a Committee of the Dorchester Antiquarian and Historical Society* (1859), p. 632.

instead of being destitute provided with an abundance for a comfortable subsistence."¹²⁰

During the period from the close of the war of 1812 until 1832, when the tariff was intermittently the most important subject of public discussion, economists and statesmen alike argued along the lines laid down by Hamilton and Coxe. They had learned that the fact that women formed so large a proportion of the employees in the "infant industries" was a valuable protectionist argument. Niles and Matthew Carey often made use of it, and memorials to Congress during the period call attention to the additions to the national wealth and prosperity made possible by the utilization in factories of women's labor which had hitherto been less advantageously employed.¹²¹ A petition from a group of manufacturers in 1815 pointed out that their establishments had afforded "the means of employment to thousands of poor women and children for whom the ordinary business of agriculture [supplied] no opportunities for earning a livelihood," and that any loss to manufacturing interests would mean that hundreds of poor women would be "thrown back on the community for support."¹²² Thus the charge that manufactures produce pauperism had been already met and it was only necessary to repeat that the number of those unable to earn their own subsistence was decreased when new or more remunerative occupations for women were provided.¹²³ As late as 1831 it is again pointed out that the decline of manufacturing would mean that the women employees would become, "from wanting the means of support, the tenants of charitable institutions or be con-

¹²⁰ White's *Memoir of Slater*, p. 118.

¹²¹ See, for example, a petition from Connecticut citizens, 1820, *American States Papers, Finance*, Vol. III, p. 453; "Address of the American Society, 1816," *op. cit.*, p. 11; "Philadelphia Memorial," *Niles Register*, Vol. XLII, p. 177; "Address of the New York Convention, 1831," *op. cit.*, p. 138. Petition from "citizens of the United States engaged in manufactures on the Brandywine (Pamphlet, 1815), pp. 4-5.

¹²² Petition urging the prohibition of the importation of coarse cottons, *American State Papers, Finance*, Vol. III, p. 33.

¹²³ "Report of the committee on Commerce and Manufactures, 1821," *Ibid.*, p. 601.

signed to prisons and penitentiaries by the vices contracted by them from idleness;"¹²⁴ and in 1835 Henry Carey said: "The improvements of the present times tend very much to reducing the demand for children and men and increasing that for young women, a change that cannot be otherwise than advantageous."¹²⁵

The labor problem of that time was fundamentally different from ours of today. Then there was question as to whether sufficient labor could be obtained to make manufacturing enterprises on a great scale successful. The days when there would be "always plenty of help in the entry" could not be foreseen. Nor was there the English difficulty with unemployed workmen, jealous of the women and machinery that were taking their places in the process of readjustment that followed the industrial revolution. Here the manufacture of cloth had not been an important industry as it was in England, and the establishment of the factory system meant the creation of new work which would make imperative the employment of thousands of operatives. The ease with which any man could become a freeholder and the superior chances of success in agriculture made it questionable whether sufficient labor could be found to run the mills if they were established and as a question of national economy, fear was expressed regarding the possible injury to our agricultural interests if much labor were diverted from the land. To the "Friends of Industry," it was therefore a useful argument to be able to say that of all the employees in our manufacturing establishments not one-fourth were able-bodied men fit for farming;¹²⁶ and the question was raised: "Was agriculture benefited when on the

¹²⁴ Andrew Gray of Newark on The Tariff in Document 20 of *Documents relative to the Manufactures of the United States, 1832*, Vol. II, p. 877.

¹²⁵ H. C. Carey's *Essay on Wages*, p. 95.

¹²⁶ M. Carey, "Addresses of the Philadelphia Society," *Essays in Political Economy*, p. 69. The "Report on Protection to the Manufactures of Cotton Fabrics" said "not one-ninth or perhaps one-tenth are able bodied men," *American State Papers, Finance*, Vol. III, p. 34. See also *Niles Register*, Vol. IX, p. 365. That the proportion of women employed was exaggerated in both these statements is evident from statistics already given. It will be remembered, however, that Kirk Boott's estimate for Lowell was "nine-tenths women;" see *supra*.

stopping of the cotton and woolen manufactures, these women returned to idleness?"¹²⁷

In the "Memorial for the Free-Trade Convention of 1831," Gallatin frankly admits that although labor generally is less productive in manufactures than if applied to other pursuits, "yet there is an exception which in some branches seems to alleviate the evil. The female labor employed in the cotton and woolen manufactures appears from the rate of their wages to be much more productive than if applied to the ordinary occupations of women. It may therefore be alleged that the fund out of which they were previously supported being thus set free, a great portion may be accumulated and annually added to the wealth and capital of the country." To be obliged to make an exception which included so large a proportion of the total number of employees was a distinct concession to the protectionists. Gallatin even proceeded to make a precise computation as to the additional quantity of productive labor put in motion, and concluded that the surplus product obtained by the employment of women in a single cotton mill of two hundred employees was \$14,000 annually.¹²⁸ But the industrial employment of women was approved on the ground of social as well as economic gains. It

¹²⁷ *Niles Register*, Vol. XI, p. 367. In *Ibid.*, Vol. X, p. 99, manufactures are lauded because of "their subserviency to the public defense; their employment of women and children, machinery, cattle, fire, fuel, steam, water, and even wind—instead of our ploughmen and male laborers."

¹²⁸ Gallatin made his estimate on the following basis: "Their wages vary from \$2 to \$3 a week; and to estimate the difference between this and what might be earned in their usual occupations at from \$1.50 or \$78 a year is certainly a large allowance. . . . In a flourishing cotton factory at Lowell, Massachusetts, where annual sales amount to \$210,000, there are 20 men and 180 women employed. The surplus product obtained by the labor of the women beyond what it would otherwise have been amounts therefore to \$14,000 or 6 per cent. upon the annual amount of sales. The ratio, as deduced in the same manner from the Committee on Manufactures, of the amount of the annual sales and the numbers and wages of women employees in the Taft, Shepherd, Wolcott and Pierce's woolen manufactures is 6 per cent. on the annual sales." (Gallatin in Taussig, *State Papers and Speeches on the Tariff*, p. 129). Another free-trader Condé Raguet, in trying to meet the argument, maintained that farm work was better "for both boys and girls than factory work," and that girls were more likely to become good wives if they worked in kitchens instead of factories. *Free Trade Advocate*, Vol. I, p. 4.

was said of young women who, before the establishment of factories, were "with their parents in a state of poverty and idleness. bare-footed and living in wretched hovels," that "since that period they are comfortably fed and clothed, their habits and manners and dwellings greatly improved and they have become useful members of society;" ¹²⁹ the women in villages remote from manufactures were pictured as "doomed to idleness and its inseparable attendants vice, and guilt."¹³⁰ A picture of a village where "free independent and happy workmen with their wives and children were employed"¹³¹ was a sign of prosperity that seemed to arouse no misgivings. Manufactures were praised not only for giving women a chance of earning their livelihood, but also for educating them in habits of honest industry and giving additional encouragement to labor and population.¹³² Matthew Carey said once in a public address¹³³ that one-half of the "young

¹²⁹ "Address to the Farmers," in M. Carey's *Essays in Political Economy*, p. 459.

¹³⁰ "Petition from Citizens of Pennsylvania," 1820, *American State Papers, Finance*, Vol. III, p. 456.

¹³¹ *Address of the Philadelphia Society for the Promotion of Domestic Industry* (Boston, 1819), p. 27. An interesting relic of the employment of families in the early mills is the following extract from an old memorandum book (*Poignaud and Plant Papers*) under date of January 27, 1815: "Dennis Rier of Newbury Port has this day engaged to come with his family to work in our factory on the following conditions. He is to be here about the 20th of next month and is to have the following wages per week:

Himself	\$ 5.00
His son Robert Rier, 10 years of age	0.83
Daughter Mary, 12 years of age	1.25
Son William, 13 years of age	1.50
Son Michael, 16 years of age	2.00
	<hr/>
	10.58
His sister Abigail Smith	2.33
Her daughter Sally, 8 years of age	0.75
Son Samuel, 13 years of age	1.50
	<hr/>
	4.58

¹³² "Petition of Manufactures of Coarse Cottons," *American State Papers, Finance*, Vol. III, p. 33. See also the chapter on "The Moral Influence of Manufactures" in White's *Slater*, pp. 118 ff.

¹³³ *Address before the Philadelphia Society for Promoting Agriculture, 1824*, 5th Ed. p. 39.

females" in the cotton factories "would be absolutely or wholly idle but for this branch of business. While employed, they contract habits of order, regularity and industry, which lay a broad and deep foundation of public and private future usefulness. They become eligible partners for life for young men, to whom they will be able to afford substantial aid in the support of families. Thus the inducement to early marriages . . . is greatly increased . . . and immensely important effects produced on the welfare of society." This statement has seemed worth quoting at some length because it shows how completely the social aspects of a problem may be neglected by an overemphasis of its economic side. Indeed, so far as women's work was concerned, there was no social problem recognized at that time.¹³⁴

It may be said then by way of summary that the protectionists who were ardent believers in the industrial employment of women found themselves in possession of a twofold argument for the cause of the "infant industries": (1) It was a convenient means of refuting the charge that labor was too scarce or wages too high to make manufactures profitable in this country;¹³⁵ or that labor would be taken from the land and agriculture neglected.¹³⁶ (2) It was easy to show that there was a clear economic advantage to the community in the establishment of factories in which women's labor which was very unproductive in agriculture could be advantageously employed.¹³⁷ It was said that thousands of

¹³⁴ Matthew Carey, in his "Address to the Farmers" (*Essays*, p. 458), says that to deprive the wives as well as the children of the farmers and country laborers of profitable employment in manufacturing establishments would be most injurious.

¹³⁵ See, e. g., *The Address of the American Society for the Encouragement of Domestic Manufactures, 1816* (New York, 1817), p. 10. See also a "Memorial on Manufactures from citizens of Baltimore, 1817": "It has been alleged that wages were too high in America to admit of our entering into competition in manufactures with the older countries of Europe, particularly Britain. We believe the opinion is not well founded . . . women and children who perform a great part of the work can be hired nearly as low here as in England." *Niles Register*, Vol. XII, p. 192.

¹³⁶ For example, see *The Address of the American Society* (1817), p. 10.

¹³⁷ Manufactures have a "tendency to bring into action a portion of labor and capital existing in this country which was not, and . . . would not have been

persons were thus turned from the consuming to the producing class.¹³⁸ A maximum return was more nearly obtained from the country's labor force. The national prosperity was increased by making women "a source of wealth rather than an incumbrance;"¹³⁹ and their work represented so much "clear gain to society"¹⁴⁰—an argument the force of which even so able a free-trader as Gallatin could not deny.¹⁴¹

It is clear that it was primarily as an economic problem and in its relation to other economic problems that Hamilton, Trench employed in any other manner. It is admitted that the female labor employed in the cotton and woolen manufactures is an example of this description."—*Address of the New York Convention* (1831), p. 138. Niles (*Register*, Vol. XII, p. 224) quotes from the *Boston Centinel*: "In Europe as in America, machinery not only facilitates labor in a tenfold ratio, but enables women and children who are unable to cultivate the earth to make us independent of foreign supplies." Carey employed a similar argument: "The services of females of the specified ages (10–16–26) employed in agriculture for which above one-half of them are too young or too delicate are very unproductive. At manufactures they are far more valuable and command higher wages" (*Essays*, p. 46. See also the "Report of the committee on Commerce and Manufactures, 1821," *American State Papers, Finance*, Vol. III, p. 691).

¹³⁸ *Niles Register*, Vol. XXIII, p. 145.

¹³⁹ *Address of The American Society* (1816), p. 11. Women, children, and old and infirm men all constitute one class in this argument. Carey said that the rise of manufactures had "elevated the females belonging to the families of the cultivators of the soil in their vicinity from a state of penury and idleness to competence and industry" (*Essays*, Vol. VIII, p. 459).

¹⁴⁰ "It will be observed that no less than 39,000 females find employment in the cotton factories of the United States, whose aggregate wages amount to upward of four million dollars annually. This immense sum paid for the wages of females may be considered so much clear gain to the country. Before the establishment of these and other domestic manufactures, this labor was almost without employment. Daughters are now emphatically a blessing to the farmer. Many instances have occurred within the personal knowledge of individuals of this committee in which the earnings of daughters have been scrupulously hoarded to enable them to pay off mortgages on the paternal farm."—*Address of the New York Convention*, 1831, p. 110. One of the resolutions passed at a Philadelphia tariff meeting declared that any injury to "the manufacturers of hats, caps and bonnets . . . destroys a large amount of labor generally considered a clear gain to the country, viz., that of females which in these articles alone produces an annual value of nearly three million dollars."—*Niles Register*, Vol. XLII, p. 277.

¹⁴¹ See Gallatin's "Memorial of the Committee of the Free Trade Convention, Philadelphia, 1831," in Taussig, *op. cit.*, p. 129.

Coxe, Gallatin, Matthew Carey, Hezekiah Niles, H. C. Carey, and the minor pamphleteers who followed in their wake, concerned themselves with women's work. Here was a fund of labor from which a larger return could be obtained, if it were employed in manufacturing industries and they made precise computations as to just how much that gain would be. More than that, here was also a defensive argument sustaining an important measure of public policy and suggesting a solution for one of the economic problems of the time. Unfortunately the employment of women was not considered on its own merits and how far it would have met condemnation instead of encouragement if it had not fitted into the scheme of a contemporary policy, it is impossible to say.¹⁴² It is only fair, however, to raise the question whether the problem of the industrial employment of women is not perhaps always primarily an economic one, and whether most of the social questions¹⁴³ connected with the working woman today would not solve themselves if she were able to command a self-respecting wage.

In conclusion, attention must be called to the obvious limitations of the present study. No attempt has been made to discuss such important subjects as wages and hours of labor, efficiency and industrial training or conditions as to health and morality. It was thought that an investigation of early industrial employments, of the statistics of employment and of the early attitude toward women's work would furnish useful information relating to one phase of an interesting subject. Its practical value will obviously be much greater when a further investigation into the history of women's work in each of the special industries studied

¹⁴² The following statement from Slater's biographer, a zealous advocate of the employment of women in the mills, is of interest: "The attempt to introduce females into other employments and especially into the printing office is very properly reprobated."

¹⁴³ The employment of married women might of course be an important exception. Miss Collet, after giving particular attention to this question in her report of 1894 (*op. cit.*), says in conclusion: "Economic advantage must frequently balance with social disadvantage and there is general consensus of opinion that the effect on the life of the family must be the test of the goodness or badness of economic conditions so far as women are concerned."

shall make clear the reasons for the changes in the proportions of women employed at different times—why, for example, in one large group of industries this proportion decreased through several decades and why it increased in another large group, and why the “point of depression” was so uniformly in the year 1870. It is hoped, however, that certain moot questions regarding the relation of women to the factory system may have been answered in part at least by this preliminary study. Evidence has certainly been given to show that any theory that women are a new element in our industrial life or that they are doing “men’s work” or that they have “driven out the men” is a theory unsupported by facts. Instead of coming in as usurpers, women have been from the beginning an important factor in American industry—in the early days of the factory system an indispensable factor—and fifty years ago there were more women relatively to the number of men employed than there are today. Additional evidence is offered here, too, supporting a point which is already perhaps sufficiently established, but not yet widely recognized, that the “woman movement” of the nineteenth century belongs almost exclusively to middle-class women. The woman of the working classes was self-supporting and was expected to be self-supporting more than three-quarters of a century ago, and even long before that she was reproached for “eating the bread of idleness.” The efforts of the middle-class woman to realize a new ideal of pecuniary independence, which have taken her out of the home and into new and varied occupations, belong to recent if not contemporary history. But this history, for her, covers a social revolution and the world she faces is a new one. The woman of the working classes finds it, so far as her measure of opportunity goes, very much as her great grandmother left it.

EDITH ABBOTT

WASHINGTON, D. C.